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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/530,722

04/08/2005

Kenji Okura

SNC-0217

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23353

7590

04/26/2006

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EXAMINER

SCRUGGS, ROBERT J

ART UNIT

PAPER NUMBER

3723

DATE MAILED: 04/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/530,722

Applicant(s)

OKURA, KENJI

Examiner

Robert Scruggs

Art Unit

3723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 10-18 is/are pending in the application.
- 4a) Of the above claim(s) 9 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7, 8 and 10-18 is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This office action is in response to amendment received on February 22, 2006. The applicant has canceled claim 9 and added new claim 18. Therefore, claims 1-8 and 10-18 will be fully examined.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 1 recites the limitation "the distances" in Line 9. There is insufficient antecedent basis for this limitation in the claim. The applicant fails to disclose any reference to a "distance" prior to the disclosed limitation, "the distances" in Line 9.

5. Claim 1 also recites the limitation "the predetermined position" in Line 9. There is insufficient antecedent basis for this limitation in the claim. The applicant fails to disclose any reference to a "predetermined position" prior to the disclosed limitation, "the predetermined position" in Line 9.

Allowable Subject Matter

6. Claims 7, 8 and 10-18 are allowed.

7. The following is an examiner's statement of reasons for allowance: The present invention pertains to a both side grinding machine. It is the examiner's opinion that the art of record considered as a whole, alone or in combination, neither anticipates nor

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renders obvious at least one hydrostatic pad for supporting the surface and back of the work with hydrostatic fluid in a non-contact state and at least three non-contact type distance sensors formed therein, which measure the distance on the surface of the workpiece being grinded at least at three points and wherein said at least one hydrostatic pad is formed on work supporting means, together in combination with the rest of the limitations or the independent claims.

8. Prior art; Ikeda et al. (6652358) discloses a double sided grinding machine having one distance sensor (9) located separately from the grinding machine used to measure the amount of warpage. Honda (5816895) discloses a surface-grinding machine that utilizes three sensors (22, 24, 26) for measuring warpage or deformation that occurs during a grinding process, wherein each sensor being located separately from the grinding machine. Sugiyama et al. (JP409262747A) discloses a double sided grinding machine including hydrostatic pads (31, 3B) formed on work supporting means used in stabilizing a substrate during a grinding process. Junzo (JP11-239956) discloses a double side-grinding machine where a pair of distance sensors (76 and 77) located on the work supporting means formed as blocks (72 and 73).

9. However, the prior art fails to disclose or teach of having a double sided grinding machine comprising, at least one hydrostatic pad for supporting the surface and back of the work with hydrostatic fluid in a non-contact state and having at least three distance sensors formed therein, which measure the distance on the surface of the workpiece being grinded at least at three points and wherein said hydrostatic pads are formed on work supporting means.

Response to Arguments

10. Applicant's arguments (see Page 10, Lines 7-20) with respect to claim 1 have been considered, however, upon further consideration, a new ground(s) of rejection is made in view of the 35 U.S.C. 112, second paragraph, indefiniteness and insufficient antecedent basis previously discussed above.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ikeda et al (5989108) discloses a double side grinding apparatus for a disc like material. Taniguchi et al (2003/0104698) discloses a method of manufacturing a semiconductor wafer where two grinding surface oppose a wafer during the grind process.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Scruggs whose telephone number is 571-272-8682. The examiner can normally be reached on Monday-Friday, 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on 571-272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RS



DAVID B. THOMAS
PRIMARY EXAMINER